

## **CHAPTER 3.0 NOISE AND VIBRATION**

### **3.1 OVERVIEW**

SEA concluded in the Final EIS issued in November of 2001, after extensive evaluation and analysis, that the proposed project would have potentially significant impacts to noise sensitive receptors due to increases in noise from greater numbers of passing DM&E freight trains and locomotive horn soundings. Additionally, SEA concluded that the proposed project would not have significant effects on noise sensitive receptors due to increased vibration as projected vibration levels would be insufficient to cause damage to nearby structures.

On judicial review of the Board's 2002 Decision in Mid States, the court affirmed SEA's noise methodology and the results it produced.<sup>1</sup> However, the court found that SEA had not adequately considered comments suggesting a synergistic relationship between noise and vibration. The court remanded this issue to SEA so that SEA could respond to these comments.

In response to the court's direction, SEA conducted additional investigation of the potential impacts to noise sensitive receptors related to noise and vibration synergies. In the Draft SEIS issued in April, 2004, SEA explained that, following its additional investigation, it had found no evidence to conclude that, at the levels of vibration anticipated from the proposed project, any increase in the annoyance from or perception of noise would occur. SEA therefore did not modify its prior noise and vibration conclusions, or recommend additional mitigation measures beyond those previously imposed by the Board in the 2002 Decision.

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<sup>1</sup> 345 F.3d at 534 to 537.

### **3.2 COMMENTS AND RESPONSES**

SEA received nine comments addressing the issues of either vibration or noise and vibration synergies. These comments included:

- General comment from a Minnesota State Representative (Tina Liebling) and three citizens expressing general concern for increased vibration as a result of the potential increases in the number of trains due to the proposed project.
- Two comments from citizens expressing concern that project-related vibration would affect the Mayo Clinic
- One comment from a citizen noting that the noise and vibration synergy study in the Draft SEIS was inadequate, although no evidence or additional information, data, resources, or references on the topic were provided.
- One citizen comment indicating that train-related vibration would be insignificant.
- Comments from the Western Coal Traffic League explaining that SEA's noise and vibration synergies analysis was thorough, objective and reasonable.

SEA has thoroughly reviewed these comments and finds that no additional analysis or additional mitigation is required by them. SEA has acknowledged throughout the environmental review process that vibration would be an impact of the proposed project. However, it would not be significant. SEA's measurement of vibration from actual passing DM&E trains, reported in the EIS, supported this conclusion. For the EIS, SEA also conducted extensive vibration testing in Rochester and determined that vibration levels due to this project would be insufficient to adversely affect medical equipment at the Mayo Clinic. These topics are no longer at issue, as the court upheld SEA's vibration methodology and conclusions. The only issue on remand is that of the potential synergistic effects of noise and vibration.

SEA received two comments on the remanded issue. One of these commenters indicated that SEA's noise and vibration synergies analysis presented in the Draft SEIS was inadequate; the other found SEA's analysis to be thorough and reasonable. But even the commenter that favored more analysis presented no evidence to contradict SEA noise and vibration synergies methodology or its conclusions in the Draft SEIS. And neither Olmsted County, Rochester, or Mayo (who had argued extensively before the court in Mid States that SEA had not considered the issue) raised any specific concerns in their comments on the Draft SEIS about SEA's additional noise and vibration synergies analysis or SEA's conclusions on this issue. In these circumstances, SEA reaffirms its prior noise and vibration synergies analysis and finds it to be appropriate and accurate. Accordingly, there is no need for additional discussion of the noise and vibration synergies issue. For the reasons explained in the Draft SEIS analysis, SEA again finds no evidence that noise and vibration from the proposed project would create synergies that would result in increased annoyance or perception of noise. As a result, SEA reaffirms its prior noise and/or vibration conclusions and finds no reason to recommend mitigation measures beyond those previously imposed by the Board.

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